TECHNICAL REVIEW AND EVALUATION
OF APPLICATION FOR
AIR QUALITY PERMIT NO. 30732

I. INTRODUCTION

This Class I, Title V permit renewal is for the operation of Salt River Project's Coronado Generating Station which is located 6 miles northeast of St. Johns off U.S. Highway 191 in St. Johns, Apache County, Arizona. This permit is a renewal of Air Quality Permit #1000106.

A. Company Information

Facility Name: Salt River Project, Coronado Generating Station

Mailing Address: PO Box 52025, PAB 352
Phoenix, AZ 85072-2025

Facility Location: Six miles Northeast of St. Johns off U.S. Highway 191
St. Johns, AZ 85936

B. Attainment Classification (Source: 40 CFR §81.303)

Salt River Project, Coronado Generating Station (SRP Coronado) is located in an area which is in attainment for all criteria pollutants.

II. FACILITY DESCRIPTION

A. Process Description

SRP Coronado generates electricity by the combustion of pulverized coal that heats water in boiler tubes to produce steam. The steam is then used to turn a turbine which is connected on a common shaft to a generator rotor. As the rotor in the generator is turned, it induces an electrical current in the stator windings of the generator, making electricity.

SRP Coronado consists of two pulverized coal fired, dry bottom steam electric generating units. The facility produces an electrical output of 912 gross megawatts. The operating units consist of a main power building, sulfur dioxide scrubbers and limestone handling equipment, electrostatic precipitators, process water treatment facilities, a forty-three mile railroad spur, coal and ash handling facilities, coal mixing facilities, ash disposal area, combined administration and service building, water storage reservoirs, a 330 acre evaporation pond for non-recoverable waters, mechanically induced draft cooling towers, 500-kV and 69-kV switchyards, and water supply from satellite well fields.

The maximum estimated process rates and operating hours of the significant points of emissions at SRP Coronado are summarized in Table 1 below.

Table 1: Maximum Estimated Process Rates

Unit	Hours	MW/hr	MW-hr/yr
Unit 1 Boiler	8760	456	3,723,000
Unit 2 Boiler	8760	456	3,723,000
Auxiliary Boiler	8760	157 (MMBtu/hr)	---

The process of generating electricity starts with the delivery of coal. Spray bars are used to control coal dust emissions during unloading. After coal is received by the facility, it is weighed sampled and transported to piles by means of a conveyor system, two lowering wells, and stacker

Coal is reclaimed by rotary plow feeders and is transported through crushing and conveyor system to coal silos. There are four baghouses to control emissions related to coal handling and wet dust suppression at transfer points. Three coal silos are provided with each boiler unit to supply 10 hours of storage capacity. Dual conveyor belts are provided from the coal yard area to the coal silos with one belt as a standby. The cascade coal gallery area located above the coal silos is partitioned off from the boiler-turbine areas and totally enclosed to control coal dust. From the coal silos the coal enters ball-tube mill type pulverizes to be crushed to the consistency of a fine powder. Each pulverizer is equipped with classifiers that prevent oversize particles of coal from being delivered to the burners.

Primary air fans transport the crushed coal to the boilers for combustion. Each steam generator is a coal-fired, oil ignited, balance draft, single drum natural circulation unit rated to provide 2,747,000 pounds of steam per hour at 2,400 psig and 1000 ^{o}F. The boilers have a single level, front-rear opposed burner arrangement with a total of 24 burners per unit. Each pulverizer supplies four front burners and four rear burners on the boiler. A slight negative pressure is created across the boiler as induced draft fans draw particulates and gases from the boiler. Flue gases pass upward through the furnace horizontally, rearward across the high-temperature superheater pendant assembly sections of boiler tubes, then vertically downward across the primary superheater and reheater tubes. An internal wall divides the flow into primary superheat and reheats sections. Both flow-sections then pass over the economizer tubes and out through the superheat and reheat control dampers. The flue gas leaving the economizer gas outlet casing flows through the electrostatic precipitators to the gas side of the regenerative air preheaters. Gas from each air preheater passes through an induced draft fan flows to the flue gas desulfurization scrubber system and/or discharges into the chimney. An oil fired auxiliary boiler is used as necessary for preheating during startup operations.

Steam from each boiler is used to turn a turbine that is connected on a common shaft to a generator rotor. The turbines are tandem compound reheat turbines with single opposed flow HP-IP rotors and two double flow low pressure turbines on a single shaft rotating at 3,600 revolutions per minute controlled by an electro-hydraulic control system. The turbines are designed to operate with main steam at 2,400 psig and 1,000 ^{o}F and reheated to 1,000 ^{o}F with steam exhausting to a condenser. Two mechanically induced draft cooling towers are used to remove heat from the main condenser circulating water systems.

Bottom ash from each boiler is collected in a boiler bottom ash hopper, flushed from the hopper crushed and mixed with water, and pumped as slurry to dewatering bins. The ash is dewatered, stored in the bins and hauled to the ash disposal area by truck.

The primary fuel used to produce electricity is coal. Number 2 fuel oil is used in the auxiliary boiler and during startup operations and flame stabilization for the boilers.

A 500-kV switchyard is provided for distribution of plant output of electrical energy. This switchyard also provides power for the common station service auxiliaries under normal operating conditions. The 500-kV generator breakers are operated from the plant.

B. Air Pollution Control Equipment

Hot-side electrostatic precipitators (ESP) are designed to remove 99.875 percent of the ash from the boiler flue gas. Two ESPs are provided for each unit and divided into two halves. Each half is provided with a single level of six parallel chambers consisting of seven fields each. The fly ash collected in the precipitator hoppers is pneumatically transferred to fly ash storage bins. Fly ash is unloaded from these bins into trucks and transported to the ash disposal area or off-site as a salable material for use in concrete.

Particulate matter emissions from material handling in the coal, fly ash, limestone, and other systems are controlled by baghouses. The coal handling facility has 10 baghouse to control emissions; 6 at the coal silos, two at the transfer areas, and one each at the Crusher house, and the sample building. The fly ash handling facility has 10 baghouses located at the bin vents and the receiving silos and the limestone handling facility has one baghouse. There are also baghouses located at the soda ash silos and the lime silos at the sand-blasting building, and at the weld shop.

Two four-stage horizontal SO_2 wet flue gas desulfurization units, or scrubbers, are provided for each boiler unit to reduce SO_2 emissions from the flue gas to the atmosphere. Limestone and water treatment slurry is used as the reagent in the scrubbers. A limestone handling system, complete with unloading, stack out and crushing facilities processes the limestone. A baghouse is provided on the limestone storage silos for dust control.

III. EMISSIONS

The facility is classified as a Major Source pursuant to Arizona Administration Code (A.A.C.) R18-2-101.64. The potential emission rates of NO_x, CO, SO_2, VOCs, PM_{10}, and HAPs are greater than major source thresholds. Typical operating parameters of the steam generating units and the auxiliary boiler are given in Table 2. Table 3 summarizes the potential to emit (PTE) for the facility and Table 4 summarizes the PTE for each emissions unit.

Table 2: Typical Operating Parameters

Description	Units 1 and 2 Boilers	Auxiliary Boiler
Maximum Annual Process Rate	24,063,720,000 lbs (steam)	919,800,000 lbs (steam)
Maximum Hourly Process Rate	2,747,000 lbs (steam)	105,000 lbs (steam)
Maximum Hourly Theoretical Heat Input	4719 MMBtu/hr	157.34 MM Btu/hr
Type of Fuel Used	Coal	Fuel Oil
Quantity of Fuel Used/Year	1,927,200 tons of coal	32,000 barrels of oil
Maximum Hourly Use	220 tons of coal	7,528 lb
Higher Heating Value of Fuel (max)	10,725 Btu/lb	20,900 Btu/lb
Sulfur Content	0.7%	N/A
Ash Content	25%	N/A
Density of oil (lb/gal)	N/A	6.97

*Table 3:Controlled Facility-Wide Emissions **

Pollutant	Tons per Year
PM_{10}	4,323.3
VOC	116.6
SO_2	33,771
NO_x	29,052
CO	991
Federal HAPs	> 25 tpy total HAPs > 10 tpy Individual HAPS

* Please refer to Title V application for detailed emission calculations.

*Table 4: Emissions of Criteria Pollutants **

Unit	Pollutant	PTE (tpy)
Unit 1 Boiler (Coal)	PM_{10}	2,067
	SO_x	16,535
	NO_x	14,468
	VOCs	57.8
	CO	482
Unit 2 Boiler (Coal)	PM_{10}	2,067
	SO_x	16,535
	NO_x	14,468
	VOCs	57.8
	CO	482
Auxiliary Boiler (Fuel Oil)	PM_{10}	15.9
	SO_x	701
	NO_x	115.6
	VOCs	1.0
	CO	24.1
Emergency Generators	PM_{10}	.43
	SO_x	1.87
	NO_x	12.49
	CO	2.64

Coal Handling	PM10	44.7
Limestone Handling	PM10	5.9
Fly Ash	PM10	7.5
Cooling Towers	PM10	39.2 each
Coal Piles	PM10	0.6
Limestone Piles	PM10	0.2
Fly Ash Disposal	PM10	2.2
Vehicular Traffic and Off-Road Machinery	PM10	34.6

* Please refer to the Title V permit application for detailed emission calculations.

IV. COMPLIANCE HISTORY

Inspections are being regularly conducted at SRP Coronado to ensure compliance with its applicable permit conditions. SRP Coronado is currently in compliance with the permit conditions cited in Permit No. 1000106. SRP Coronado has not been issued any Notices of Violation (NOVs) to date (one in 2001 for opacity at the coal pile). The following table summarizes the inspections that were conducted on the source.

Table 5: Facility inspections

Inspection Date	FAR Number	Type of Inspection	Results
6/12/01		Compliance	NOV for opacity at coal pile
11/14/02	31183	Compliance	In Compliance

V. APPLICABLE REGULATIONS

The Permittee has identified the applicable regulations that apply to each unit in its permit application. Table 6 below summarizes the findings of the Department with respect to the regulations that are applicable to each emissions unit. Previous permit conditions are discussed under Section VI of this technical review document.

Table 6: Applicable Regulations

Unit ID	Start-up date	Control Equipment	Applicable Regulations	Verification
nits 1 and 2	7/25/74	ESP (2 per unit), SO_2 scrubber	40 CFR 60.42(a)(1) 40 CFR 60.42(a)(2) A.A.C. R18-2-903.1 A.A.C. R18-2-903.3 40 CFR 60.43(a)(1) 40 CFR 60.43(c) 40 CFR 60.44(a)(2) 40 CFR 60.44(a)(3) 40 CFR 60.44(b) 40 CFR 60.45(a) 40 CFR 60.45(g)(1) 40 CFR 60.45(g)(2) 40 CFR 60.45(g)(3) 40 CFR 60.46(b)(1) 40 CFR 60.46(b)(2) 40 CFR 60.46(b)(3) 40 CFR 60.46(b)(5) 40 CFR 60.46(d)(1) 40 CFR 64 (CAM)	The units commenced construction after August 17, 1971 and are greater than 73 MW capacity. There are standards for PM, SO_2, NOx and Opacity
Auxiliary Boiler	7/25/74	None	A.A.C. R18-2-724.A A.A.C. R18-2-724.B A.A.C. R18-2-724.C.1 A.A.C. R18-2-724.E A.A.C. R18-2-724.G A.A.C. R18-2-724.J A.A.C. R18-2-724.K	The heat input of this unit is 157 MMBtu/hr (< 250 MMBtu/hr) and the date of construction is prior to the trigger date (6/9/89) for 40 CFR 60, Subpart Da. Hence, this unit is subject to R18-2-724. The unit is subject to an opacity standard of 15% and SOx standard of 1.0 lb/MMBtu.
Generator and Emergency Fire pumps*		None	A.A.C. R18-2-719.A R18-2-719.B R18-2-719.C.1 R18-2-719.E R18-2-719.F R18-2-719.I R18-2-719.H R18-2-719.J R18-2-719.K	Stationary Rotating Machinery subject to State rules
Limestone Handling		Johnson March Baghouse and Spray Bars	A.A.C. R18-2-702.B A.A.C. R18-2-720.B.2 A.A.C R18-2-612 A.A.C R18-2-722.F A.A.C R18-2-722.G	The regulations listed are applicable to existing Lime Manufacturing Plants.
Coal Handling		Johnson March Baghouses	A.A.C. R18-2-702.B A.A.C R18-2-716.B A.A.C R18-2-716.D A.A.C R18-2-716.E	The regulations listed are applicable to existing Coal Preparation Plants

Unit ID	Start-up date	Control Equipment	Applicable Regulations	Verification
Fly Ash Handling		Flex-Kleen and Johnson March Baghouses	A.A.C. R18-2-702.B A.A.C. R18-2-730.A.1.b	The regulations listed are applicable to existing unclassified sources.
Cooling Towers		None	A.A.C. R18-2-702.B A.A.C. R18-2-730.A.1.b A.A.C. R18-2-730.D A.A.C. R18-2-730.G	The regulations listed are applicable to existing unclassified sources.
Fugitive Dust	Not Applicable	Control Measures	*A.A.C.* *R18-2-602* *R18-2-604.A* *R18-2-604.B* *R18-2-605* *R18-2-606* *R18-2-607* *R18-2-612*	The regulations listed are applicable to non point sources
Abrasive Blasting	Not Applicable	Wet blasting, enclosure or equivalent approved by director	*A.A.C.* *R18-2-726* *R18-2-702.B*	Relevant requirements applicable to abrasive blasting
Spray Painting	Not Applicable	Control measures that attain 96% efficiency	*A.A.C.* *R18-2-727* *R18-2-702.B*	Relevant requirements applicable to spray painting
Mobile Sources	Not Applicable	Control Measures	*A.A.C.* *R18-2-801* *R18-2-802.A* *R18-2-804*	These regulations are applicable to all mobile sources
Demolition/ Renovation	Not Applicable	None	*A.A.C.* *R18-2-1101.A.8* *(NESHAPs for asbestos)*	Relevant requirements applicable to demolition and renovation operations

* The emergency generator is assumed to be limited to 500 hours of operation based on the guidance document produce by EPA entitled "Calculating Potential to Emit (PTE) for Emergency Generators," by John S. Seitz.

VI. PREVIOUS PERMITS AND CONDITIONS

A. Previous Permits

Table 7 below table lists the previous permits that have been issued to SRP Coronado.

Table 7: Previous Permits

Date Permit Issued	Permit #	Application Basis
05/20/1999	1000106	Class I, Title V, operating permit
9/17/1999	1001060	Class I minor revision
08/08/2000	1001246	Standard Class I significant revision
07/31/2001	1001535	Class I minor revision

B. Previous Permit Conditions

The following are discussions on the previous permits that have been issued to the source.

CLASS I, TITLE V OPERATING PERMIT NO. 1000106

This operating permit was issued to SRP Coronado on 05/20/1999 to operate their two coal-fired dry bottom steam electric generating units.

OP #1000106, References	Determination				Comments
	Revise	Keep	Delete	Stream-line	
Att. A.	X				General provisions - revised to represent most recent language
Att. B.I.A.1		X			Opacity Standard of 20% and 27% for one six-minute period per hour for the boilers of Units 1 and 2
Att. B.I.A.2		X			PM Standard of 43 nanograms per joule heat input for the boilers of Units 1 and 2
Att. B.I.A.3.a		X			Sulfur Dioxide Standard for coal burned in the boilers of Units 1 and 2
Att. B.I.A.3.b		X			Sulfur Dioxide Standard for used fuel oil burned in the boilers of Units 1 and 2
Att. B.I.A.3.c		X			Sulfur Dioxide Standard for combination fuel burned in the boilers of Units 1 and 2
Att. B.I.A.3.d		X			Compliance shall be based on the total heat input from all fuels burned
Att. B.I.A.4.a		X			Nitrogen Oxide Standard for coal burned in the boilers of Units 1 and 2
Att. B.I.A.4.b		X			Nitrogen Oxide Standard for used fuel oil burned in the boilers of Units 1 and 2
Att. B.I.A.4.c		X			Nitrogen Oxide Standard for combination fuel burned in the boilers of Units 1 and 2
Att. B.I.A.5.a		X			Allowable fuel to be burned in the boilers of Units 1 and 2

OP #1000106, References	Determination				Comments
	Revise	Keep	Delete	Stream-line	
Att. B.I.B.1		X			Opacity standard of 40 percent for auxiliary boiler
Att. B.I.B.2		X			PM standard for auxiliary boiler
Att. B.I.B.3		X			Sulfur Dioxide standard of no more than 1.0 pounds per million Btu heat input for the auxiliary boiler
Att. B.I.B.4.a		X			High sulfur oil is not permitted to be burned as fuel in auxiliary boiler
Att. B.I.B.4.b		X			Only Number 2 fuel oil and used oil is permitted to be burned as fuel in the auxiliary boiler
Att. B.I.B.5		X			Definition of heat input
Att. B.I.C.1	X				Opacity standard of 40% until April 23, 2006 then the opacity can not exceed 20%.
Att. B.I.C.2		X			It was determined that the coal handling plant was subject to NSPS Subpart Y. Since there is no PM standard in the NSPS for a coal handling facility that does not include a thermal dryer or coal cleaning equipment, the PM standard for coal handling plant has been deleted.
Att. B.I.D.1	X				Opacity standard of 40% until April 23, 2006 then the opacity can not exceed 20%
Att. B.I.D.2		X			PM standard for limestone handling
Att. B.I.E.1	X				Opacity standard of 40% until April 23, 2006 then the opacity can not exceed 20%
Att. B.I.E.2		X			PM standard for fly ash handling
Att. B.I.F.1	X				Opacity standard of 40% until April 23, 2006 then the opacity can not exceed 20%
Att. B.I.F.2		X			PM standard for cooling towers 1 and 2
Att. B.I.F.3		X			Requirement to not emit gaseous or odorous material as to cause air pollution
Att. B.I.F.4		X			Option for Director to require the installation of abatement equipment to reduce or eliminate the discharge of air pollution
Att. B.I.G		X			Non-Point source and open burning requirements
Att. B.I.H.1		X			Abrasive Blasting requirements
Att. B.I.H.2		X			Use of paints requirements
Att. B.I.H.3		X			Vapor extractors requirements
Att. B.I.H.4			X		Landfill operations requirements do apply since they do not have a landfill.
Att. B.I.H.5		X			Mobile source requirements

OP #1000106, References	Determination				Comments
	Revise	Keep	Delete	Stream-line	
Att. B.I.H.6		X			Demolition/Renovation requirements
Att. B.I.H.7		X			Nonvehicle air conditioner maintenance and service
Att. B.II.A.1		X			Maintain and operate four electrostatic precipitators associated with the boilers of units 1 and 2 in a manner consistent with good air pollution control practice
Att. B.II.A.2		X			Maintain and operate sulfur dioxide scrubber associated with the boilers of units 1 and 2in a manner consistent with good air pollution control practice
Att. B.II.A.3		X			Maintain and operate Riley Stoker turbo fired boilers with overfire air associated with the boilers of units 1 and 2in a manner consistent with good air pollution control practice
Att. B.II.B		X			Maintain and operate the eleven baghouses used to capture PM emissions associated with coal handling
Att. B.II.C.1		X			Maintain and operate the baghouses used to capture PM emissions associated with limestone handling
Att. B.II.C.2		X			Spray Bar pollution controls on lime preparation site.
Att. B.II.D		X			Maintain and operate the baghouses used to capture PM emissions associated with fly ash handling
Att. B.III.A		X			With 180 days, certified EPA Reference Method 9 opacity observer must be staffed
Att. B.III.B		X			All monitoring activities must be submitted with compliance certifications
Att. B.III.C		X			Any change in fuel type must be logged in ink or electronic format
Att. B.III.D		X			A log of all adjustments, replacements and maintenance performed on air pollution control equipment must be maintained
Att. B.III.E.1.a		X			CEM systems is required for NOx, SOx and CO_2
Att. B.III.E.1.b		X			Requirements for CEM systems
Att. B.III.E.1.c		X			Recordkeeping and reporting requirements of 40 CFR Part 75 Subparts F and G
Att. B.III.E.1.d		X			Requirements for continuous opacity monitoring system (COMS)
Att. B.III.E.1.e		X			Requirement to maintain two sets of opacity filters for calibration and audit standards
Att. B.III.E.2.a		X			Requirement to evaluate opacity measurements from the COMS on a 24-hr rolling average

OP #1000106, References	Determination				Comments
	Revise	Keep	Delete	Stream-line	
Att. B.III.E.2.b		X			Record in ink or electronic format the 24-hr opacity measurements performed
Att. B.III.E.2.c		X			Record in ink or electronic format the 24-hr opacity measurements performed
Att. B.III.E.3.a		X			Excess emission for opacity
Att. B.III.E.3.a(1)		X			Excess emission for opacity
Att. B.III.E.3.a(2)		X			Excess emission for PM
Att. B.III.E.3.a(3)		X			Excess emission for SO_2
Att. B.III.E.3.(4)		X			Excess emission for NOx
Att. B.III.E.3.b(1)		X			Excess emission report requirements
Att. B.III.E.3.b(2)		X			Excess emission report requirements
Att. B.III.E.3.b(3)		X			Excess emission report requirements
Att. B.III.E.3.b(4)		X			Excess emission report requirements
Att. B.III.E.3.c		X			Excess emission report requirements
Att. B.III.F.1		X			Opacity monitoring for auxiliary boiler
Att. B.III.F.2.a(1)		X			Auxiliary boiler opacity monitoring schedule based on how long liquid fuel is being combusted.
Att. B.III.F.2.a(2)		X			Auxiliary boiler opacity monitoring schedule based on how long liquid fuel is being combusted
Att. B.III.F.2.b	X				Maintaining records of opacity readings and number of hours fuel oil is burned continuously
Att. B.III.F.3.a		X			Requirement to keep fuel supplier certification
Att. B.III.F.3.b		X			Maintain records of emissions calculations for SO_2
Att. B.III.F.4		X			Excess emission reporting for boilers
Att. B.III.G.1.a		X			Opacity monitoring requirements for coal handling
Att. B.III.G.1.b		X			Opacity monitoring requirements for coal handling
Att. B.III.G.1.c		X			Opacity monitoring requirements for coal handling
Att. B.III.G.1.d		X			Opacity monitoring requirements for coal handling

OP #1000106, References	Determination				Comments
	Revise	Keep	Delete	Stream-line	
Att. B.III.G.2.a		X			Keep manufacturer's specifications on file and readily available for inspection for baghouses associated with coal handling
Att. B.III.G.2.b		X			Maintain records of emissions related maintenance performed on baghouses associated with coal handling
Att. B.III.H.1.a		X			Opacity monitoring requirements for limestone handling
Att. B.III.H.1.b		X			Opacity monitoring requirements for limestone handling
Att. B.III.H.1.c		X			Opacity monitoring requirements for limestone handling
Att. B.III.H.1.d		X			Opacity monitoring requirements for limestone handling
Att. B.III.H.2.a		X			Keep manufacturer's specifications on file and readily available for inspection for baghouses associated with limestone handling
Att. B.III.H.2.b		X			Maintain records of emissions related maintenance performed on baghouses associated with limestone handling
Att. B.III.H.3		X			Maintaining and operate monitoring devices to determine the daily process weight of limestone produced.
Att. B.III.H.4		X			Maintain records of daily production rates.
Att. B.III.I.1.a		X			Opacity monitoring requirements for fly ahs handling
Att. B.III.I.1.b		X			Opacity monitoring requirements for fly ahs handling
Att. B.III.I.1.c		X			Opacity monitoring requirements for fly ahs handling
Att. B.III.I.1.d		X			Opacity monitoring requirements for fly ahs handling
Att. B.III.I.2.a		X			Keep manufacturer's specifications on file and readily available for inspection for baghouses associated with fly ash handling
Att. B.III.I.2.b		X			Maintain records of emissions related maintenance performed on baghouses associated with fly ash handling
Att. B.III.J.1		X			Open Areas, Roadways & streets, Storage Piles, and Material Handling.
Att. B.III.J.2		X			Open burning recordkeeping requirements.
Att. B.III.K.1		X			Abrasive blasting recordkeeping requirements
Att. B.III.K.2		X			Recordkeeping for the use of paints.
Att. B.III.K.3		X			Mobile source recordkeeping requirements.
Att. B.III.K.4		X			Recordkeeping for demolition and renovation work.

OP #1000106, References	Determination				Comments
	Revise	Keep	Delete	Stream-line	
Att. B.III.K.5		X			Non vehicular Air conditioner Maintenance and/or Service recordkeeping
Att. B.IV.A			X		EPA Reference Method 9 definition is incorporated by reference and therefore it is unnecessary.
Att. B.IV.B	X				Startup, shutdown and malfunction will not constitute normal operation. This condition has been moved to all the NSPS limits under Units 1 and 2, (for example SO_2 and NO_x.
Att. B.IV.C.1		X			Using oxygen or carbon dioxide as a Diluent gases for CEMS testing.
Att. B.IV.C.2		X			Particulate Matter Testing, EPA Reference Method 5, 5B, or 17.
Att. B.IV.C.3			X		Sulfur Dioxide Testing EPA Reference Method 6 or 6C is being deleted because this condition is already included in the QA/QC required by the Acid Rain provisions and Compliance CEMs.
Att. B.IV.C.4			X		Nitrogen Oxide Testing EPA Reference Method 7 or 7E is being deleted because this condition is already included in the QA/QC required by the Acid Rain provisions and Compliance CEMs.
Att. B.IV.C.5		X			Opacity Testing EPA Reference Method 9
Att. B.V.A		X			Used Oil Specification
Att. B.V.B		X			Used oil limitations
Att. B.V.C		X			Recordkeeping and Reporting requirements for used oil.
Att. B.V.D		X			Testing requirements for the use of used oil
Attachment "C"	X				Applicable Requirements have been identified in the permit shield and authority for permit conditions.
Attachment "D"		X			Equipment List
Attachment "E"		X			Insignificant Activities
Attachment "F"		X			Phase II Acid Rain Provisions

MINOR PERMIT REVISION #1001060 TO CLASS I OPERATING PERMIT #1000106

This minor permit revision to the Class I operating permit was issued to SRP Coronado on September 17, 1999.

Minor revision #1001060	Determination				Comments
	Revise	Keep	Delete	Stream-line	

Minor revision #1001060	Determination				Comments
	Revise	Keep	Delete	Stream-line	
Att. B. I.H.3.a(1)		X			VOC limit of 4.3 pounds per gallon delivered to a coating applicator that applies clear coatings
Att. B. I.H.3.a(2)		X			VOC limit of 3.5 pounds per gallon delivered to a coating applicator that is air dried
Att. B. I.H.3.a(3)		X			VOC limit of 4.3 pounds per gallon delivered to a coating applicator that applies extreme performance coatings
Att. B. I.H.3.a(4)		X			VOC limit of 4.3 pounds per gallon delivered to all other coating and application systems
Att. B. I.H.3.b		X			Least stringent emissions limitation shall be applied
Att. B. I.H.3.c		X			VOC emissions from solvent washings shall be considered in emissions limitations
Att. B. III.E.3.a		X			Excess emission and monitoring system performance reports
Att. B. III.K.6.a		X			Recordkeeping requirements for surface coating activities
Att. B. III.K.6.b		X			Performing engineering calculations using density and VOC Content of the surface coating

SIGNIFICANT REVISION #1001246 TO CLASS I OPERATING PERMIT #1000106

This significant permit revision to the Class I operating permit was issued to SRP Coronado on August 8, 2000. All the conditions in this significant revision where not included in the Renewal permit because significant revision 1001246 is an Alternate Operating Scenario which allow SRP to do a one time test burn of a pet-coke/coal/fuel oil blend in Units 1 and 2 over a 3 to 4 week period. After this test burn the facility will revert back to the operating condition that are specified in permit #1000106.

Significant Revision #1001246	Determination				Comments
	Revise	Keep	Delete	Stream-line	
Att. B.VI.A.1.			X		Defining what the Alternate operating Scenario is, the use of pet-coke/coal or pet-coke/coal/fuel oil blend in either Units 1 or 2.
Att. B.VI.A.2.			X		Explains that even during the operation of the Alternate Operating Scenario, Attachment "A" and the rest of the permit still apply to the facility.
Att. B.VI.B.1.			X		The NSPS emission limit for Sulfur Dioxide has been slightly changes, to where it applies to the burning of pet-coke or any combination of pet-coke, coal, ad fuel oil.

Significant Revision #1001246	Determination				Comments
	Revise	Keep	Delete	Stream-line	
Att. B.VI.B.2.			X		Condition stating that the boiler will only burn a pet-coke/coal or pet-coke/coal/fuel oil combination at any one time.
Att. B.VI.B.3.			X		Operational limitation stating that the Alternate Operating Scenario be for one continuous time period.
Att. B.VI.B.4.a.1			X		Fuel limitation requirement, that the permittee can only burn the fuel listed in the permit when in the alternate operating scenario.
Att. B.VI.B.4.a.2			X		Fuel limitation requirement, that the permittee can only burn a pet-coke/coal blend when in the alternate operating scenario
Att. B.VI.B.4.a.3			X		Fuel limitation requirement, that the permittee can only burn a pet-coke/coal/fuel oil blend when in the alternate operating scenario
Att. B.VI.B.4.b			X		The pet-coke blends cannot exceed a weigh percent of 20%.
Att. B.VI.B.4.c			X		The AOS will terminate when 24,000 ton throughput limit is triggered.
Att. B.VI.B.4.d			X		The pet coke will not have a greater sulfur content then 6%.
Att. B.VI.C.1			X		Record all malfunctions that occur during the AOS.
Att. B.VI.C.1.a			X		Description of the malfunction
Att. B.VI.C.1.b			X		Date, start time of the malfunction, and end time of the malfunction.
Att. B.VI.C.2			X		Record any fuel change
Att. B.VI.C.2.a			X		Fuel change of any of the fuel listed in the normal operation.
Att. B.VI.C.2.b			X		Type of fuel being used in each unit.
Att. B.VI.C.2.c			X		Amount of pet-coke in the pet-coke blends.
Att. B.VI.C.2.d			X		Date, start time and end time of when the pet-coke blends are used.
Att. B.VI.C.3			X		Records of the mass of pet-coke burned in tons.
Att. B.VI.C.4			X		Records of pet-coke supplier certification.
Att. B.VI.C.5			X		Log the scenario in which the unit are operating.

MINOR REVISION #1001535 TO CLASS I OPERATING PERMIT #1000106

This minor permit revision to the Class I operating permit was issued to SRP Coronado on July 31, 2000.

Significant Revision #1001535	Determination				Comments
	Revise	Keep	Delete	Stream-line	
Att. A. XII.B.2	X				Permit Deviation Reporting
Att. B. I.A.1.a		X			New Definition of startup with respect to Units one and two
Att. B. I.A.3.b		X			SRP must keep records of the time that startup, shutdown and malfunction occurred, and when the CEMS are inoperative
Att. B. III.E.3.b		X			Excess Emissions and Monitoring Systems Performance Reports
Att. B. V		X			Typographical changes

VII. PERIODIC MONITORING

A. Unit 1 and 2 Boilers

1. Opacity

The units are subject to an opacity standard of 20% under 40 CFR 60.42(a)(2). There is an exception that allows for one six-minute period per hour of not more than 27% opacity. In accordance with 40 CFR 60.11(c), this limitation is exempt during periods of startup, shutdown, or malfunction. The source provided specific definitions for these three categories which are included in the permit conditions.

The Permittee is required to operate a continuous monitoring system for opacity. This monitor will be used as the periodic monitoring method. The monitoring system is required to meet the requirements of 40 CFR 60.13 and 40 CFR 60, Appendix B, Performance Specification 1. In addition to the periodic monitoring using continuous opacity monitors, the Permittee is required to perform an annual EPA Reference Method 9 test on the stacks of each unit. In accordance with Permit #1000106, the Permittee shall maintain two sets of opacity filters, one to be used as calibration standards and one to be used as audit standards.

2. Fuel

Permittee is restricted to burning only coal, Number 2 fuel oil, and on specification used oil in the boilers. In addition, the Permittee is required to maintain a record of any change in fuel type.

B. Auxiliary Boiler

1. Opacity

The boiler is subject to the opacity standard of 15% in A.A.C. R18-2-724.J. The Permittee will be required to conduct a weekly (once every weeks) survey of visible emissions emanating from Auxiliary Boiler. If the opacity of the emissions observed exceeds 15%, the observer shall conduct a certified EPA Reference Method 9 observation. The Permittee will be required to keep records of the initial survey and any EPA Reference Method 9 observations performed. These records will

include the emission point observed, location of observer, name of observer, date and time of observation, and the results of the observation. If the observation shows a Method 9 opacity reading in excess of 15%, the Permittee will be required to initiate appropriate corrective action to reduce the opacity below the standard. The Permittee will keep a record of the corrective action performed. The Permittee is also required to monitor and record the number of hours fuel oil is burned continuously in the units.

2. Particulate Matter

The units are subject to the particulate matter emissions standard in A.A.C. R18-2-724.C.1. Because fuel oil is burned in the boiler, the Permittee is required to monitor particulate matter emissions by monitoring the fuel burned in the unit. The Permittee is also required to monitor the following information about the fuel found in the contractual agreement with the liquid fuel vendor:

a. Heating value; and

b. Ash content.

Although ash content by itself is not a valid measure of particulate matter emissions, monitoring this would help the agency to "ballpark" the particulate matter emissions. No engineering estimation using ash content is prescribed in the permit since it could be interpreted to incorrectly correlate particulate matter emissions to ash content only. The Permittee is also required to keep on record a copy of the contractual agreement and notify the Director within 30 days of any change in the contractual agreement.

As part of this Title V renewal, ADEQ is hereby removing the annual performance test for PM because potential PM emissions from the boiler are 9.46 tpy, which is less the allowable emission rate set forth by the process rate weight equation.

3. Sulfur Oxides

The boiler is subject to sulfur dioxide standard in A.A.C. R18-2-724.E. Because the unit burns fuel oil, the emissions standard is 1.0 lb/MMBtu. The Permittee is required to keep on record fuel supplier certification including the following information:

a. The name of the oil supplier;

b. The sulfur content and the heating value of the fuel from which the shipment came from; and

c. The method used to determine the sulfur content of the oil.

Permittee is required to make engineering calculations for SOx emissions using the information from above according to the following equation for each fuel delivery:

SO_2 (lb/MMBtu) = 2.0 x [(Weight percent of sulfur/100) x Density (lb/gal)]/[(Heating value (Btu/gal)) x (1 MMBtu/1,000,000 Btu)]

4. Fuel

The Permittee is not allowed to burn high sulfur oil (>0.9% by weight) as a fuel unless it is demonstrated that low sulfur oils aren't available. In addition, Number 2 fuel oil and on specification used oil may be burned in the auxiliary boiler.

5. MACT Exemption

The source is designating the auxiliary boiler as a limited use liquid fuel unit. This is in order to avoid the Boiler MACT provisions, except for an initial notification. For a boiler to be defined as a "limited use liquid fuel unit", the unit must be limited to less then a 10% annual average capacity factor (CF). The permit requires the source to operate the auxiliary boiler at an annual capacity factor of less then 10%. The source will also maintain records of the boiler's daily fuel usage and at the end of each calendar year calculate the heat input on MMBtu/day.

C. Internal Combustion Engines

1. Opacity

The generators or internal combustion engines are subject to a 40% opacity limitation The Permittee will be required to conduct a weekly (once every weeks) survey of visible emissions emanating from the internal combustion engines. If the opacity of the emissions observed exceeds 40%, the observer shall conduct a certified EPA Reference Method 9 observation. The Permittee will be required to keep records of the initial survey and any EPA Reference Method 9 observations performed. These records will include the emission point observed, location of observer, name of observer, date and time of observation, and the results of the observation. If the observation shows a Method 9 opacity reading in excess of 40%, the Permittee will be required to initiate appropriate corrective action to reduce the opacity below the standard. The Permittee will keep a record of the corrective action performed. The source is also required to keep a record of the corrective action performed.

2. Particulate Matter

The source is required to monitor the lower heating value of the fuel being combusted in the internal combustion engines. Compliance with this requirement may be demonstrated by maintaining copy of the fuel supplier certification specifying the lower heating value.

3. Sulfur Dioxide

The source is required to not burn high sulfur fuel, and is limited to emissions of sulfur dioxide to 1.0 pound per million Btu heat input. The source is required to maintain records of daily sulfur content and lower heating value of the fuel fired in the internal combustion engines, along with a copy of the fuel supplier certification specifying the sulfur content and lower heating value.

D. Coal Handling

1. Opacity

The coal handling facility is will be subject to a 40% opacity standard which will decrease to 20% in April 2006, as stated in A.A.C. R18-2-702. The Permittee will be required to conduct a weekly survey of visible emissions emanating from the coal handling facility. If the opacity of the emissions observed exceeds the opacity standard, the observer shall conduct a certified EPA Reference Method 9 observation. The Permittee will be required to keep records of the initial survey and any EPA Reference Method 9 observations performed. These records will include the emission point observed, location of observer, name of observer, date and time of observation, and the results of the observation. If the observation shows a Method 9 opacity reading in excess of the opacity standard, the Permittee will be required to initiate appropriate corrective action to reduce the opacity below the standard. The Permittee will keep a record of the corrective action performed. The source is also required to keep a record of the corrective action performed.

E. Limestone Handling

1. Opacity

The limestone handling plant is will be subject to a 40% opacity standard which will decrease to 20% in April 2006, as stated in A.A.C. R18-2-702. The Permittee will be required to conduct a weekly survey of visible emissions emanating from the limeststone handling facility. If the opacity of the emissions observed exceeds the opacity standard, the observer shall conduct a certified EPA Reference Method 9 observation. The Permittee will be required to keep records of the initial survey and any EPA Reference Method 9 observations performed. These records will include the emission point observed, location of observer, name of observer, date and time of observation, and the results of the observation. If the observation shows a Method 9 opacity reading in excess of the opacity standard, the Permittee will be required to initiate appropriate corrective action to reduce the opacity below the standard. The Permittee will keep a record of the corrective action performed. The source is also required to keep a record of the corrective action performed.

2. Particulate Matter

The source is subject to the particulate matter standard in A.A.C. R18-2-720.B.2. The Permittee is required to maintain and operate the baghouse in accordance with the manufacturer's specification. Permittee is also required to hold these specifications on file. Emissions related maintenance work needs to be recorded.

F. Fly Ash Handling

1. Opacity

The fly ash handling plant will be subject to a 40% opacity standard which will decrease to 20% in April 2006, as stated in A.A.C. R18-2-702. The Permittee will be required to conduct a weekly survey of visible emissions emanating from the fly ash handling facility. If the opacity of the emissions observed exceeds the opacity standard, the observer shall conduct a certified EPA Reference Method 9 observation. The Permittee will be required to keep records of the initial survey and any EPA Reference Method 9 observations performed. These records will include the emission point observed, location of observer, name of observer, date and time of observation, and the results of the observation. If the observation shows a Method 9 opacity reading in excess of the opacity standard, the Permittee will be required to initiate appropriate corrective action to reduce the opacity below the standard. The Permittee will keep a record of the corrective action performed. The source is also required to keep a record of the corrective action performed

2. Particulate Matter

The source is subject to the particulate matter standard in A.A.C. R18-2-730.B.1. The Permittee is required to maintain and operate the ten baghouses in accordance with the manufacturer's specification. Permittee is also required to hold these specifications on file. Emissions related maintenance work needs to be recorded.

G. Cooling Towers 1 and 2

SRP does not use Chromium-6 in the cooling towers at the Coronado Generating Station. Therefore, they are not subject to MACT for cooling towers under 40 CFR Part 63, Subpart Q.

1. Opacity

The cooling tower is subject to the opacity standard of 40% opacity standard which will decrease to 20% in April 2006, as stated in A.A.C. R18-2-702.

2. Particulate Matter

The units are also subject to particulate matter emissions standard under A.A.C. R18-2-730.A.1.

H. Fugitive Emissions

The standards in Article 6 of the Arizona Administrative Code (A.A.C.) are applicable requirements for non-point sources. The following sources will be monitored:

1. Driveways, parking areas, vacant lots
2. Unused open areas
3. Open areas (Used, altered, repaired, etc.)
4. Construction of roadways
5. Material transportation
6. Material handling
7. Storage piles
8. Stacking and reclaiming machinery at storage piles

All of these areas must comply with the opacity limitation of 40%. The control measures for most of these activities include dust suppressants and/or wetting agents and reasonable precautions. To conduct open burning, Permittee must obtain a permit from ADEQ, or the local officer in charge of issuing burn permits.

The Permittee is required to make a bi-weekly survey of the visible emissions from all non-point sources. The Permittee is required to create a record of the date on which the survey was taken, the name of the observer, and the results of the survey. If the visible emissions do not appear to exceed the standard, the Permittee would note in the record that the visible emissions were of low opacity, and it did not require a Method 9 to be performed.

If the Permittee finds that on an instantaneous basis the visible emissions are in excess of the opacity standard, then he is required to make a six-minute Method 9 observation. If this observation indicates opacity in excess of the standard, then the Permittee is required to report it as excess emissions. In addition, the Permittee is required to adjust the process equipment or process control equipment to bring the opacity below the standard. If the Permittee finds that the visible emissions is less than the opacity standard, then the Permittee is required to record the source of emission, date, time, and result of the test. Monitoring and recordkeeping requirements for the nonpoint sources include a record of the date and type of activity performed, and the type of controls used. Also, monitoring requirements for the applicable open burning rule may be satisfied by keeping all open burn permits on file.

I. Other Periodic Activities

1. Abrasive Sand Blasting

SRP has indicated in the permit application that abrasive sand blasting activities are conducted on-site. The applicable requirements are A.A.C. R18-2-726 and A.A.C. R18-2-702(B) and are included in the permit. Monitoring requirements include:

a. Date project was conducted;
b. Duration of project;
c. Type of control measures employed

2. Spray Painting

SRP has indicated in the permit application that spray painting activities are conducted on-site.

The applicable requirements are A.A.C. R18-2-727 and A.A.C. R18-2-702(B) and are included in the permit. A.A.C. R18-2-727(A) and A.A.C. R18-2-727(B) are included in the approved State Implementation Plan (SIP). A.A.C. R18-2-727(C) and A.A.C. R18-2-727(D) are also a part of the approved SIP. They are present in the definitions section of the SIP as R9-3-101.117. EPA approved SIP provision R9-3-527.C is not present in the amended rule. However, R9-3-527.C is an applicable requirement, and is federally enforceable until the current State SIP is approved by the EPA. Monitoring requirements include:

a. Date project was conducted;
b. Duration of project;
c. Type of control measures employed;
d. Material Safety Data Sheets for all paints and solvents used in the project.

3. Mobile Sources

The Permittee is required to keep a record of all emissions related maintenance activities performed on Permittee's mobile sources stationed at the facility as per manufacturer's specifications for the purposes of monitoring and recordkeeping

4. Asbestos Demolition/Renovation

The Permittee is required to keep a record of all required paperwork on file for the purposes of monitoring and recordkeeping. The required paperwork includes "NESHAP Notification for Renovation and Demolition Activities" form and all supporting documents.

5. Nonvehicle Air Conditioner Maintenance and/or Services

The Permittee is required to keep a record of all paperwork required by the applicable requirements of 40 CFR 82 - Subpart F on file for the purposes of monitoring and recordkeeping.

J. Used Oil Fuel

All of the previous permit conditions regarding used oil fuel have been incorporated into this Title V permit. The Permittee is required to burn only on-site generated on-specification used oil with contaminants less than the following:

Arsenic	5 ppm
Cadmium	2 ppm
Chromium	10 ppm
Lead	100 ppm
PCBs	2 ppm

In addition, the flash point of the used oil shall not fall below 100 degrees Fahrenheit. The amount of used oil shall not exceed 350 barrels annually. This requirement carried over from a prior permit condition.

Recordkeeping and reporting requirements include semi-annual report which contains an inventory of the fuel oil used throughout the year. Testing requirements include a test for chlorinated solvents prior to burning and an annual test for arsenic, cadmium, chromium, and lead.

VIII. COMPLIANCE ASSURANCE MONITORING (CAM) (40 CFR 64) FOR UNITS 1 AND 2:

A. Particulate Matter

1. Background

a. Emission Unit

Description:	Coal Fired Steam Electric Generating Units
Unit Identification:	Unit 1 and Unit 2
Air Pollution Control ID:	ESP 1 and ESP 2
Facility:	Coronado Generating Station

b. Applicable Regulation, Emissions Limit, and Monitoring Requirements

Regulation:	A.A.C. R18-2-901.2 (40 CFR 60, Subpart D)
Emission Limit:	PM<0.1 lb/MMBtu
Monitoring Requirements:	Continuous Opacity Monitoring System (COMS)

c. Control Technology — Hot-Side Electrostatic Precipitators

2. Monitoring Approach

Opacity is an indicator of PM. Particulate Matter emission test data and concurrent opacity monitoring data indicates that compliance with the applicable 18% opacity limit provides a significant margin for demonstrating continuous compliance with the applicable 0.1 lb/MMBtu PM limit.

ADEQ has included in the permit that if the 3 hour average opacity, excluding periods of startup, shutdown, or malfunction, exceeds 18%, the period will constitute a PM excursion. This will be reported to the Department as a deviation, unless during the 3 hour period, a EPA reference method test can be performed that demonstrates PM emissions were less than 0.1 lb/MMBtu.

3. Monitoring Approach Justification

The CAM indicator selected is the opacity of the stack exhaust. Opacity was selected as the performance indicator because, as the opacity of emissions increases, it can be reasonably assumed that PM emissions increase. In addition, the facility has been required to conduct annual PM testing, and past data indicates that the unit opacity limits provide a significant margin of compliance with the PM limits.

The indicator range selected for opacity is a 3-hour rolling average opacity of less than 18%.Data in the application show that this can be met. When the 3-hours average is outside the indicator range, the event will be recorded as a PM excursion and reported to the Department as an excursion, unless an EPA reference method test is conducted during the event and it is demonstrated that emissions are less than the applicable limit.

CAM Plan for ESP

Indicator and its measurement approach	Opacity from the stack shall be the indicator and continuous opacity monitoring systems (COMS) will be used as the measurement approach
Indicator Range	The indicator range for opacity will be over a 3 hour rolling average of less than 18% opacity.
Data representativeness	The data will represent normal operating conditions, this will exclude startup, shutdown, and malfunctions.
Verification of	N/A

operational status	
QA/QC practices and criteria	SRP is required by the permit to meet the QA/QC requirements of 40 CFR 60, Appendix B, Performance Specification 1, "Specification and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources"
Monitoring Frequency	The COMS shall be in continuous operation and shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
Data Collection Procedure	SRP will reduce all data from the COMS to 6-minute averages. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period.
Averaging period	SRP will be required the monitor the opacity over a 3-hour averaging period.

B. Sulfur Oxides

The source is subject to the sulfur dioxide standard of 0.8 lb/MMBtu heat input in A.A.C. R18-2-903.1 while burning coal. Compliance test results indicate that the units are able to meet the standard. The Permittee is required to operate a continuous emissions monitoring system (CEMS) for recording emissions of sulfur dioxide. The CEMS will be used as CAM for sulfur dioxide for both units. The monitoring system is required to meet the requirements of 40 CFR 60.13 and 40 CFR 75, Appendix A and B

C. Nitrogen Oxides

The units are subject to the nitrogen oxide standard of 0.70 lb/MMBtu heat input in 40 CFR 60.44(a)(3) when burning coal and 0.30 lb/MMBtu in 60.44(a)(2) when burning fuel oil. If burning a combination of coal and fuel oil, the units are subject to the standard calculated by the equation of 40 CFR 60.44(b). Compliance test results indicate that the units are able to meet the standard.. The Permittee is required to operate a continuous emissions monitoring system (CEMS) for recording emissions of nitrogen oxides. The CEMS will be used as CAM for nitrogen oxide for both units. The monitoring system is required to meet the requirements of 40 CFR 60.13 and 40 CFR 75, Appendix A and B.

IX. TESTING REQUIREMENTS

A. Unit 1 and Unit 2 Boilers

SRP is required to perform annual performance tests for opacity, particulate matter, SO_2 and NO_x in accordance with 40 CFR Part 60, Subpart D. Installed CEMS will be used as the periodic monitoring method

1. Particulate Matter

   The Permittee is required to perform annual tests for particulate matter emissions using EPA Reference Methods 5, 5b, or 17.

2. Sulfur Dioxide

   The testing requirements for sulfur dioxide have been removed on account of the fact that they are included in the QA/QC requirements of the Acid Rain provisions for the CEMs.

3. Nitrogen Oxides

The testing requirements for nitrogen oxides have been removed on account of the fact that they are included in the QA/QC requirements of the Acid Rain provisions for the CEMs.

B. Auxiliary Boiler

1. Opacity

The boiler is subject to the opacity standard of 15% in A.A.C. R18-2-724.J. The Permittee will be required to conduct a biweekly (once every two weeks) survey of visible emissions emanating from the auxiliary boiler. If the opacity of the emissions observed exceeds the opacity standard, the observer shall conduct a certified EPA Reference Method 9 observation as described in Condition I.E of Attachment "B" of the permit.

2. Particulate Matter

The boiler is subject to the process rate weight equation as stated in A.A.C. R18-2-724.C.1. The allowable emissions calculated from the process rate weight equation is larger then the potential to emit of the unit, as a result there is not performance testing requirements for particulate matter.

C. Internal Combustion Engines

1. Opacity

The internal combustion engines are subject to the opacity standard of 40% in A.A.C. R18-2-719.E. The Permittee will be required to conduct a biweekly (once every two weeks) survey of visible emissions emanating from the internal combustion engines. If the opacity of the emissions observed exceeds the opacity standard, the observer shall conduct a certified EPA Reference Method 9 observation as described in Condition I.E of Attachment "B" of the permit.

2. Particulate Matter

The generators are subject to the process rate weight equation as stated in A.A.C. R18-2-719.C.1. The allowable emissions calculated from the process rate weight equation is larger then the potential to emit of the unit, as a result there is not performance testing requirements for particulate matter.

D. Coal Handling

1. Opacity

The coal handling facility is subject to a 40% opacity standard which will decrease to 20% in April 2006, as stated in A.A.C. R18-2-702. The Permittee will be required to conduct a biweekly (once every two weeks) survey of visible emissions emanating from the coal handling facility. If the opacity of the emissions observed exceeds the opacity standard, the observer shall conduct a certified EPA Reference Method 9 observation as described in Condition I.E of Attachment "B" of the permit.

2. Particulate Matter

The coal handling facility is subject to the process rate weight equation as stated in A.A.C. R18-2-716.B.2. The allowable emissions calculated from the process rate weight equation is larger then the potential to emit of the unit, as a result there is not performance testing requirements for particulate matter.

E. Limestone Handling

1. Opacity

   The limestone handling facility is subject to a 40% opacity standard which will decrease to 20% in April 2006, as stated in A.A.C. R18-2-702. The Permittee will be required to conduct a biweekly (once every two weeks) survey of visible emissions emanating from the limestone handling facility. If the opacity of the emissions observed exceeds the opacity standard, the observer shall conduct a certified EPA Reference Method 9 observation as described in Condition I.E of Attachment "B" of the permit.

2. Particulate Matter

   The limestone handling facility is subject to the process rate weight equation as stated in A.A.C. R18-2-722.B.2. The allowable emissions calculated from the process rate weight equation is larger then the potential to emit of the unit, as a result there is not performance testing requirements for particulate matter.

F. Flyash Handling

1. Opacity

   The flyash handling facility is subject to a 40% opacity standard which will decrease to 20% in April 2006, as stated in A.A.C. R18-2-702 The Permittee will be required to conduct a biweekly (once every two weeks) survey of visible emissions emanating from the flyash handling facility. If the opacity of the emissions observed exceeds the opacity standard, the observer shall conduct a certified EPA Reference Method 9 observation as described in Condition I.E of Attachment "B" of the permit.

2. Particulate Matter

   The flyash handling facility is subject to the process rate weight equation as stated in A.A.C. R18-2-730.A.1.b. The allowable emissions calculated from the process rate weight equation is larger then the potential to emit of the unit, as a result there is not performance testing requirements for particulate matter.

G. Cooling Towers

1. Opacity

   The cooling towers are subject to a 40% opacity standard which will decrease to 20% in April 2006, as stated in A.A.C. R18-2-702.. The Permittee will be required to conduct a biweekly (once every two weeks) survey of visible emissions emanating from the internal combustion engines. If the opacity of the emissions observed exceeds the opacity standard, the observer shall conduct a certified EPA Reference Method 9 observation.

2. Particulate Matter

   The cooling towers are subject to the process rate weight equation as stated in A.A.C. R18-2-730.A.1.b. The allowable emissions calculated from the process rate weight equation is larger then the potential to emit of the unit, as a result there is not performance testing requirements for particulate matter.

H. Used Oil Fuel

1. The Permittee shall test all used oil prior to burning for chlorinated solvents by using EPA Method 9007.

2. The Permittee test a representative sample of the use fuel oil annually for Arsenic, Cadmium, Chromium, and Lead using approved EPA Methods.

X. MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (MACT)(40 CFR 63)

A. Stationary Reciprocating Internal Combustion Engines (RICE)(Subpart ZZZZ)

This MACT is applicable to stationary RICE located at major sources of Hazardous Air Pollutant (HAP) emissions. A stationary source does not have to itself be a major source of HAPs – it is subject to this MACT if it is located at a major source of HAP emissions. Since the SRP Coronado facility is major for HAPs this MACT needs to be listed as a potentially applicable requirement.

According to 40 CFR 63.6590.b.3, any existing emergency engines located at the facility are exempt from all requirements of this subpart and of subpart A of the 40 CFR 63. No initial notification is required also. The only engines at the SRP Coronado facility are the emergency generator that was built in 1977 as stated in the equipment list of the permit and two emergency fire pumps. This would qualify the engines for the exemption and the RICE MACT does not apply to this facility.

B. Industrial, Institutional, and Commercial Boilers, and Process Heaters (Subpart DDDDD)

This MACT is applicable to industrial, commercial, and institutionalized boilers and process heaters located at any major source of HAP emissions. A boiler or process heater, itself, does not have to be a major source of HAPs; above mentioned boilers and process heaters are subject to this MACT if it is located at a major source of HAP emissions.

According to 40 CFR 63.7491.C, an electric steam generating unit that is a fossil fuel-fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale is not subject to this subpart. The total rated capacity of the SRP electric steam generating units is 912 megawatts, and therefore the SRP Coronado facility is exempt from this MACT requirement.

XI. INSIGNIFICANT ACTIVITIES

The following table includes a list of activities proposed by SRP Coronado to be insignificant. This table includes an evaluation of whether the activity can be deemed as insignificant pursuant to A.A.C. R18-2-101.57.

The following activities were proposed to be insignificant in the permit application (activities in redline format are being evaluated for significance):

S. No.	Activity	Insignificant	Comment
1	5,000 gallon sulfuric acid storage tank	Yes	No applicable requirement
2	7,000 gallon sodium hydroxide storage tank	Yes	No applicable requirement
3	5,000 gallon copper corrosion inhibitor storage tank (50% water solution of sodium tolytriazole)	Yes	No applicable requirement
4	3,000 gallon coagulant storage tanks (aqueous sodium aluminate solution) (2)	Yes	No applicable requirement
5	5,000 gallon antiscalant/dispersant storage tank (aqueous solution of sodium phosphonate and polyacrylates)	Yes	No applicable requirement
6	2,000 lb pH control/hardness conditioning storage tank (phosphates) and 400 gallon morpholine	Yes	No applicable requirement
7	400 gallon oxygen scavenger storage tank (aqueous modified amino compound)	Yes	No applicable requirement
8	1250 gallon corrosion inhibitor (aqueous solution of borate, nitrate and nitrite)	Yes	No applicable requirement
9	15,000 gallon vehicle diesel fuel storage tank (2)	Yes	A.A.C. R18-2-101.54.c
10	1,000,000 gallon fuel oil storage tank (#2 diesel fuel)	Yes	No applicable requirement
11	10,000 gallon unleaded gasoline storage tank (2)	Yes	A.A.C. R18-2-101.54.b
12	10 nitrogen cylinders at 7500 scf each	Yes	A.A.C. R18-2-101.54.i
13	15 hydrogen cylinders at 7500 scf each	Yes	A.A.C. R18-2-101.54.i
14	12 chlorine cylinders at 1 ton each	No	SRP is subject to 40 CFR Part 68 for chlorine, which has a threshold of 25 lbs.
15	16,000 gallon turbine lube oil storage tank	Yes	No applicable requirement
16	550 gallon hydraulic oil HD 100 storage tank (2)	Yes	No applicable requirement
17	550 gallon AW machine oil 150 storage tank (2)	Yes	No applicable requirement
18	550 gallon AW machine oil 68 storage tank (2)	Yes	No applicable requirement

19	550 gallon AW machine oil 32 storage tank (2)	Yes	No applicable requirement
20	550 gallon hydraulic fluid storage tank (2)	Yes	No applicable requirement
21	550 gallon ethylene glycol storage tank (2)	Yes	No applicable requirement
22	550 gallon almasol gear lube 90 weight storage tank (2)	Yes	No applicable requirement
23	mineral oil storage tank	Yes	No applicable requirement
24	lube oil vapor extractors	No	There is an applicable requirement (A.A.C. R18-2-730)
25	generator vapor extractors	No	There is an applicable requirement (A.A.C. R18-2-730)
26	boiler feed pump	Yes	No applicable requirement
27	50,000 gallon bearing cooling water (2)	Yes	No applicable requirement
28	15,000 gallon brine sump	Yes	No applicable requirement
29	miscellaneous steam vents	Yes	No applicable requirement
30	paint building with controls	No	There is an applicable requirement (A.A.C. R18-2-727)
31	sandblasting/welding/metal fabrication with controls	No	There is an applicable requirement (A.A.C. R18-2-726)
32	permitted asbestos landfill	No	There is an applicable requirement (40 CFR 61 Subpart M)
33	miscellaneous rotating machinery less than 325 aggregate bhp	No	There is an applicable requirement (A.A.C. R18-2-719
34	IC engine compressors	No	Subject to A.A.C R18-2-719
35	Quality control/assurance laboratory	Yes	A.A.C. R18-2-101.54.i
36	Drum storage and handling	Yes	No applicable requirement

37	Boiler feedwater water treatment and storage	Yes	No applicable requirement
38	Process water treatment and storage	Yes	No applicable requirement
39	On-site domestic wastewater and sewage treatment (10,000 gal/day)	Yes	No applicable requirement
40	Housekeeping activities and associated cleaning products	Yes	No applicable requirement
41	Heating ventilation & air conditioning equipment not designed to remove air contaminants	Yes	No applicable requirement
42	General office activities	Yes	No applicable requirement
43	Restroom facilities and associated cleanup operations and vents	Yes	No applicable requirement
44	Normal consumer use of consumer products including hazardous substances as defined in 15 U.S.C. 1261 et. seq.	No	The hazardous substances defined are too general to be considered insignificant. The source may request for specific substances to be evaluated for insignificance
45	Vacuum cleaning systems used exclusively for commercial/industrial purposes	Yes	No applicable requirement
46	Landscaping and site housekeeping activities	Yes	A.A.C. R18-2-101.54.a
47	Fugitive emissions from landscaping activities	Yes	A.A.C. R18-2-101.54.a
48	Use of pesticides, fumigants, and herbicides	Yes	No applicable requirement
49	Groundskeeping activities and products	Yes	A.A.C. R18-2-101.54.a
50	Firefighting activities and training conducted at the source in preparation for fighting fires	No	There is an applicable requirement (A.A.C. R18-2-602)

51	Open burning activities	No	There is an applicable requirement (A.A.C. R18-2-602)
52	Flares used to indicate danger	Yes	No applicable requirement
53	Activities associated with the construction, repair, or maintenance of roads or other paved or open areas, including operation of street sweepers, vacuum trucks, spray trucks or other vehicles related to the control of fugitive emissions of such roads or other areas	No	There is an applicable requirement (A.A.C. R18-2-604)
54	Road and lot paving operations	No	There is an applicable requirement (A.A.C. R18-2-605)
55	Cindering of streets and roads to abate traffic hazards caused by ice and snow	Yes	No applicable requirement
56	Street and parking lot striping	No	There is an applicable requirement (A.A.C. R18-2-604)
57	Fugitive dust emissions from the operation of passenger vans, automobiles, station wagons, pickup trucks, or vans at a stationary source	No	There is an applicable requirement (A.A.C. R18-2-604)
58	Equipment using water, water and soap or detergent, or a suspension of abrasives in water for the purposes of cleaning or finishing	Yes	No applicable requirement
59	Construction and disturbance of surface areas for purposes of land development (must still comply with AAC title 18, Chapter 2, Article 6 and other applicable requirements)	No	There is an applicable requirement (A.A.C. R18-2-604)
60	Activities at a source associated with the maintenance, repair, or dismantlement of an emissions unit or other equipment installed at the source, including preparation for maintenance, repair or dismantlement and preparation for subsequent startup, including preparation of a shutdown vessel for entry, replacement of insulation, welding, cutting, and steam purging of a vessel prior to startup; also includes maintenance, repair or dismantlement of building, utility lines, pipelines, wells, excavation, earthworks, and other structures that do not constitute and emissions unit (must comply with all applicable requirements)	No	There is an applicable requirement (A.A.C. R18-2-730)
61	Containers, reservoirs or tanks used exclusively in dipping operations to coat objects with oils, waxes, or greases	No	There is an applicable requirement (A.A.C. R18-2-730)
62	Activities directly used in the diagnosis and treatment of injury or other medical condition	Yes	No applicable requirement
63	Manually operated equipment used for buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, surface grinding, or turning, and associated venting	Yes	A.A.C. R18-2-101.54.f

64	Various emissions points such as: sampling points, analyzers, process instrumentation, individual burners and sootblowers (emissions calculated as aggregate from generating units); transportable test equipment; individual flanges, valves, pump seals, pressure relief valves, and other individual components with the potential for leaks (must comply with applicable requirements).	No	There is an applicable requirement (A.A.C. R18-2-730)
65	Brazing, soldering, or welding operations	Yes	No applicable requirement
66	Battery recharging areas	Yes	No applicable requirement
67	Aerosol can usage	Yes	No applicable requirement
68	Plastic pipe welding	Yes	No applicable requirement
69	Acetylene, butane and propane torches and their use	Yes	No applicable requirement as long as remain under 10,000 lb as stated in 40 CFR 68.130
70	Architectural painting and associated surface preparation for maintenance purposes (must comply with applicable requirements)	No	There is an applicable requirement (A.A.C. R18-2-727)
71	Steam vents, condenser vents, and boiler blowdown	Yes	No applicable requirement
72	Equipment used exclusively for portable steam cleaning	Yes	No applicable requirement
73	Blast cleaning equipment using a suspension of abrasives in water and any exhaust system or collector serving them exclusively	Yes	No applicable requirement
74	Surface impoundments such as ash ponds, cooling ponds, evaporation ponds, settling ponds, and storm water ponds	No	There is an applicable requirement (A.A.C. R18-2-730)
75	Pump/motor oil reservoirs	Yes	No applicable requirement
76	Transformer vents	Yes	No applicable requirement

77	Lubricating system reservoirs	Yes	No applicable requirement
78	Hydraulic system reservoirs	Yes	No applicable requirement
79	Adhesive use not related to production	Yes	No applicable requirement
80	Caulking operations not part of production process	Yes	No applicable requirement
81	Electric motors	Yes	No applicable requirement
82	High voltage induced corona	Yes	No applicable requirement
83	Safety devices such as fire extinguishers	Yes	No applicable requirement
84	Soil gas sampling	Yes	No applicable requirement
85	Filter draining	Yes	No applicable requirement
86	General vehicle maintenance and servicing activities	Yes	No applicable requirement with the exception being any activity contained in 40 CFR 82
87	Station transformers	Yes	No applicable requirement
88	Circuit breakers	Yes	No applicable requirement
89	Storage cabinets for flammable products	Yes	No applicable requirement
90	Fugitive emissions from any landfill operations (if landfill not otherwise subject to federal applicable requirement)	No	There is an applicable requirement (A.A.C. R18-2-731)

XII. LIST OF ABBREVIATIONS

A.A.C.	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
Btu/ft^3	British Thermal Units per Cubic Foot
MM Btu/hr	Million British Thermal Units per Cubic Foot
CFR	Code of Federal Regulations
CO	Carbon Monoxide
EPA	Environmental Protection Agency
ft^3/hr	Cubic Foot per Hour
ft^3/min	Cubic Foot per Minute
ft^3	Cubic Foot
^oF	Degree Fahrenheit
HAP	Hazardous Air Pollutant
lb/hr	Pound per Hour
NDO	Natural Draft Opening
NOV	Notice of Violation
NO_x	Nitrogen Oxides
PM	Particulate Matter
PM_{10}	Particulate Matter Nominally less than 10 Micrometers
PTE	Permanent Total Enclosure
RTO	Regenerative Thermal Oxidizer
SIP	State Implantation Plan
SO_2	Sulfur Dioxide
VOC	Volatile Organic Compound